

# [Chronic and communicable diseases](https://assignbuster.com/chronic-and-communicable-diseases/)

[Health & Medicine](https://assignbuster.com/essay-subjects/health-n-medicine/)

Disease Spreads by Vectors There are many ways that human beings contract diseases form their environment or from other living organisms. Diseases bring problems to the bodies of human beings, as well as other animals. They affect the body processes from taking place in the normal way. Therefore, they cause emaciation loss of body condition in animals and most diseases result in instant deaths of animals and human beings. This brief write up will examine the spread of diseases by vectors and the most common vectors that transmit diseases human beings.
Disease Spreads by Vectors
There are many ways that human beings contract diseases form their environment or from other living organisms. Diseases bring problems to the body of a human being, as well as other animals. They affect the body processes from taking place in the normal way. From the infectious diseases perspective, vectors are the agents that transmit organisms that cause diseases (Beaty, 1996). These organisms are responsible for carrying pathogens to different hosts, as they feed or move from one animal to the other. Vectors fall under the category of invertebrate animals and this category of animals comprise the arthropods (Gubler, 1997).
It is imperative to note that vertebrates can also act as vectors, which can transmit diseases as invertebrates. For instance, skunks, raccoons and foxes are among the vectors that transmit diseases, despite the fact that they are vertebrates. They can transmit the virus that causes rabies in human beings through a bite. Although the arthropods constitute the largest percentage of the unknown species of animals, they are the most significant disease vectors (Beaty, 1996). Vectors can have a direct or indirect effect on human health. The direct effect of vectors on human health results from tissue infestations, stings and bites from the vectors. On the other hand, the indirect effect results from transmission of organisms causing diseases.
The most distinguished vectors of disease are the ticks and mosquitoes, but there are various genera of arthropods, which play a function in the disease of human (Lemon, 2008). Further, the most crucial mode that vectors utilize to transmit the vector-borne diseases is the biological transmission which entails the blood-feeding arthropods. The pathogen reproduces while it lives within the vector arthropod, and the pathogen is passed to the host as the vector feeds on blood from the host (Gubler, 1997). Furthermore, vectors can transmit diseases through mechanical transmission; they carry the disease-causing organisms on their body surface or body parts from a host to another host.
There are three factors that affect the transmission of diseases that are vector-borne to human beings. These factors include the person host, the vector and the pathologic agent (Goddard, 2000). Most diseases that are vector-borne utilize animals as their vertebrate host to survive in nature and they can, therefore, be transmitted from animals to human beings. Such diseases are referred to as zoonoses diseases. It is worth noting that there are diseases that do not have significant animal host as malaria, but other diseases require reservoirs to host them until they are exposed to susceptible human beings (Lemon, 2008).
Therefore, such diseases do not affect the animals that act as reservoirs, but they only survive there as they wait for human host. The vector draws the pathogen from other hosts that are infected, and the vectors transmit them to the hosts that are intermediary, or the vectors can as well transmit the pathogens to human hosts (Aksoy, 2008). Vector-borne diseases are more prevalent in places that are heavily infested with vectors since the vectors are required for their noble role of transmitting the pathogens.
References
Aksoy, S. (2008). Transgenesis and the Management of Vector-Borne Disease. New York: Springer.
Beaty, B. J., & Marquardt, W. C. (1996). The Biology of Disease Vectors. Niwot, CO: University Press of Colorado.
Goddard, J. (2000). Infectious Diseases and Arthropods. Totowa, NJ: Humana Press.
Gubler, D. J. (1997). Resurgent Vector-Borne Diseases as a Global Health Problem. Emerging Infectious Diseases, 3(5).
Lemon, S. M. (2008). Vector-borne Diseases: Understanding the Environmental, Human Health, and Ecological Connections: Workshop Summary. London: National Academies Press.